



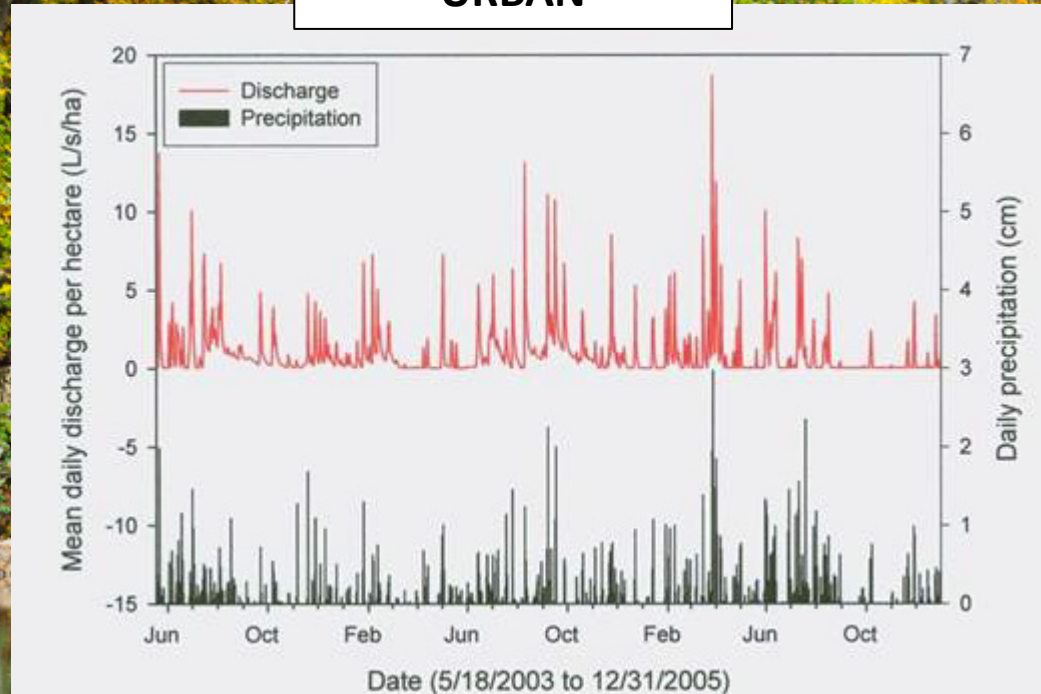
SOUTHEASTERN PARTNERSHIP FOR
FORESTS & WATER

ACF Waters Conference | April 24, 2024

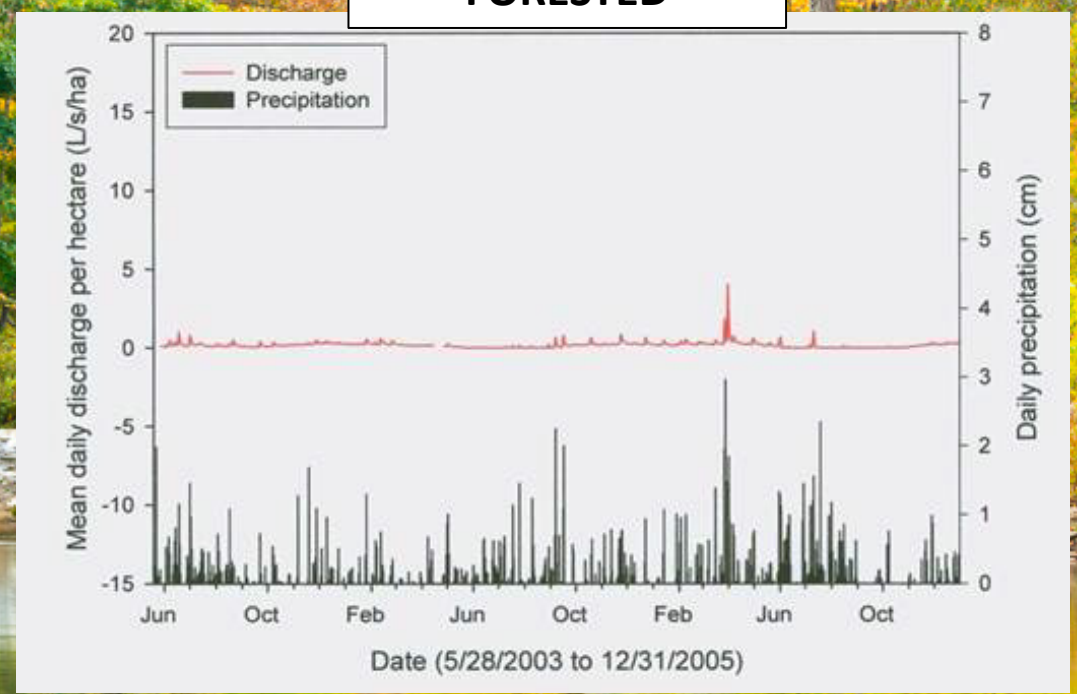


PRECIPITATION vs DISCHARGE

URBAN

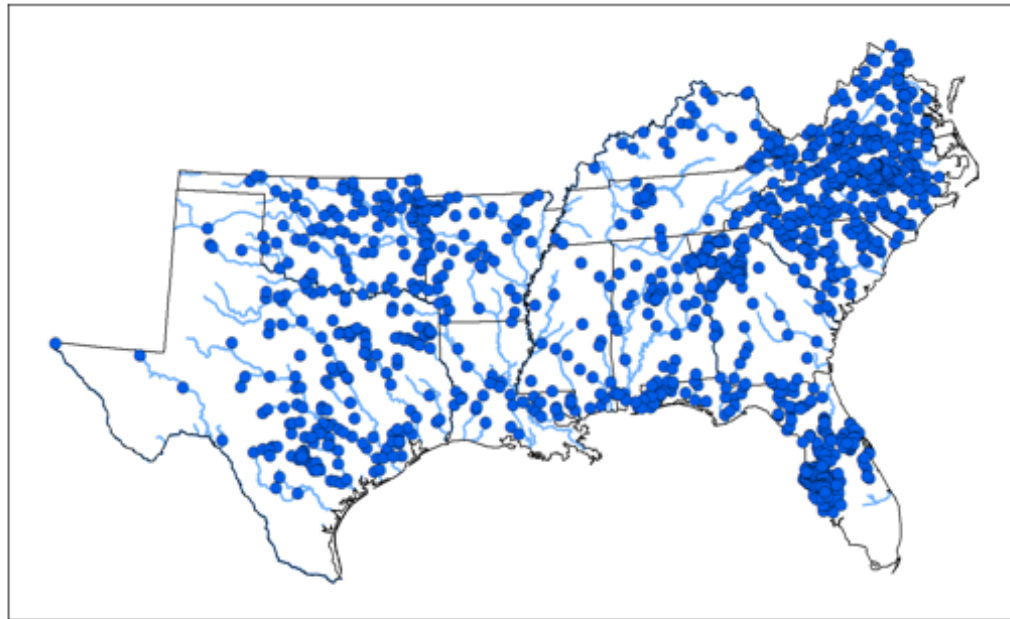


FORESTED



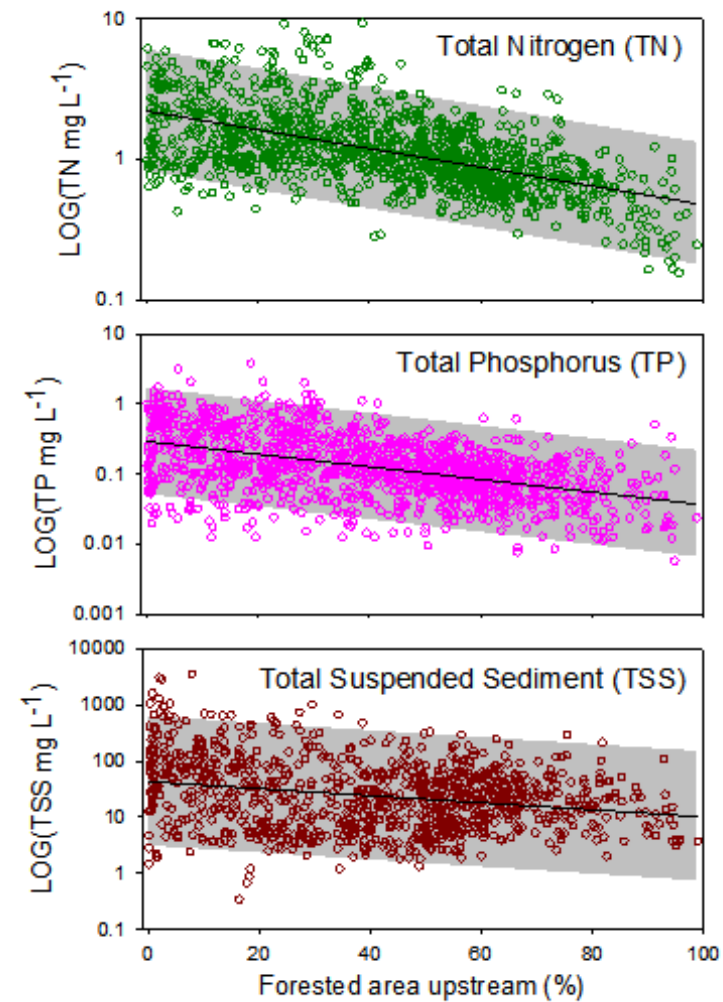
Observed water quality increases with increasing upstream forest

Water quality monitoring sites



Caldwell, et al., 2023

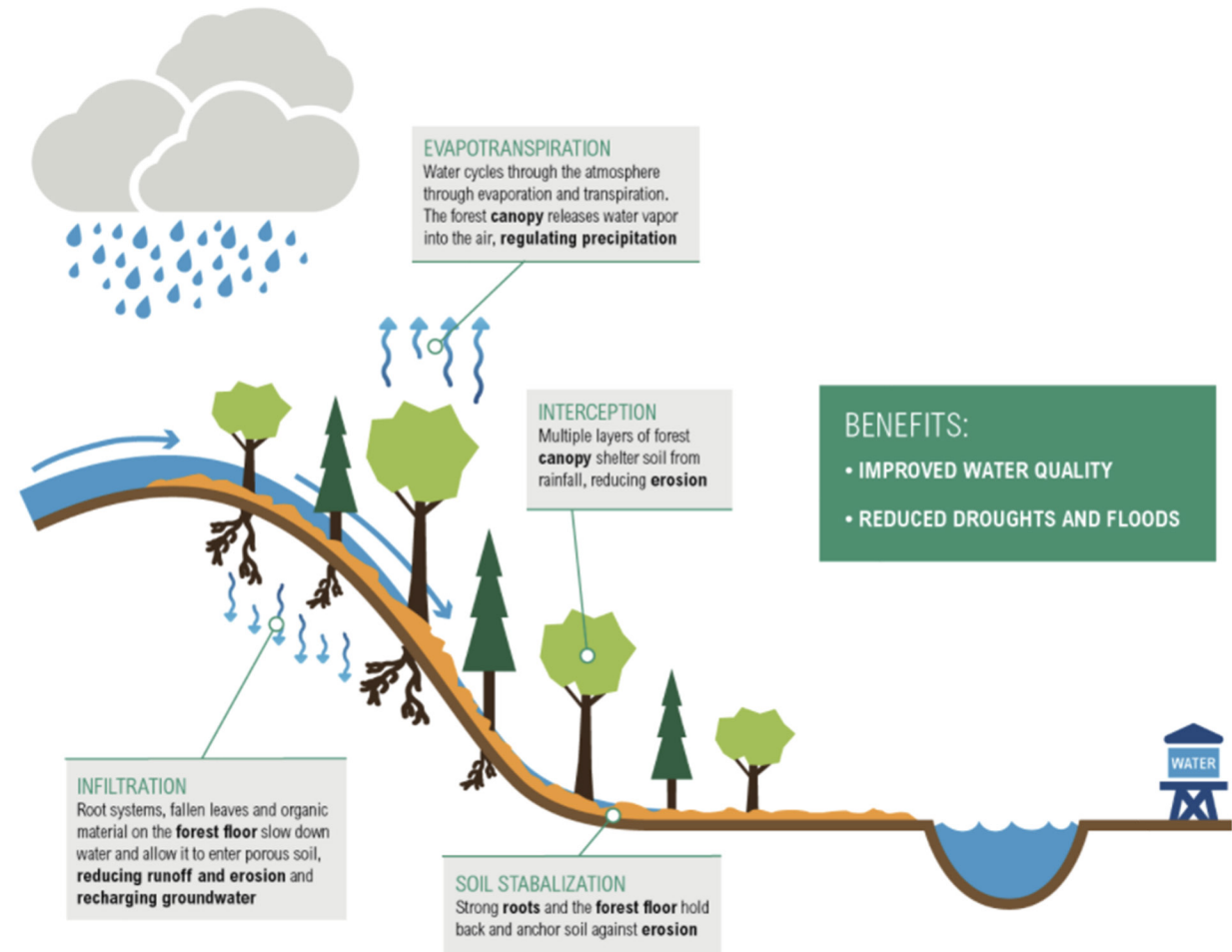
1999-2014 mean
TN, TP, and TSS concentration



HEALTHY FORESTS:

- Regulate precipitation
- Reduce flooding
- Reduce erosion
- Filter pollutants
- Recharge groundwater

How Natural Infrastructure Improves Water Security



water.globalforestwatch.org

 WORLD RESOURCES INSTITUTE

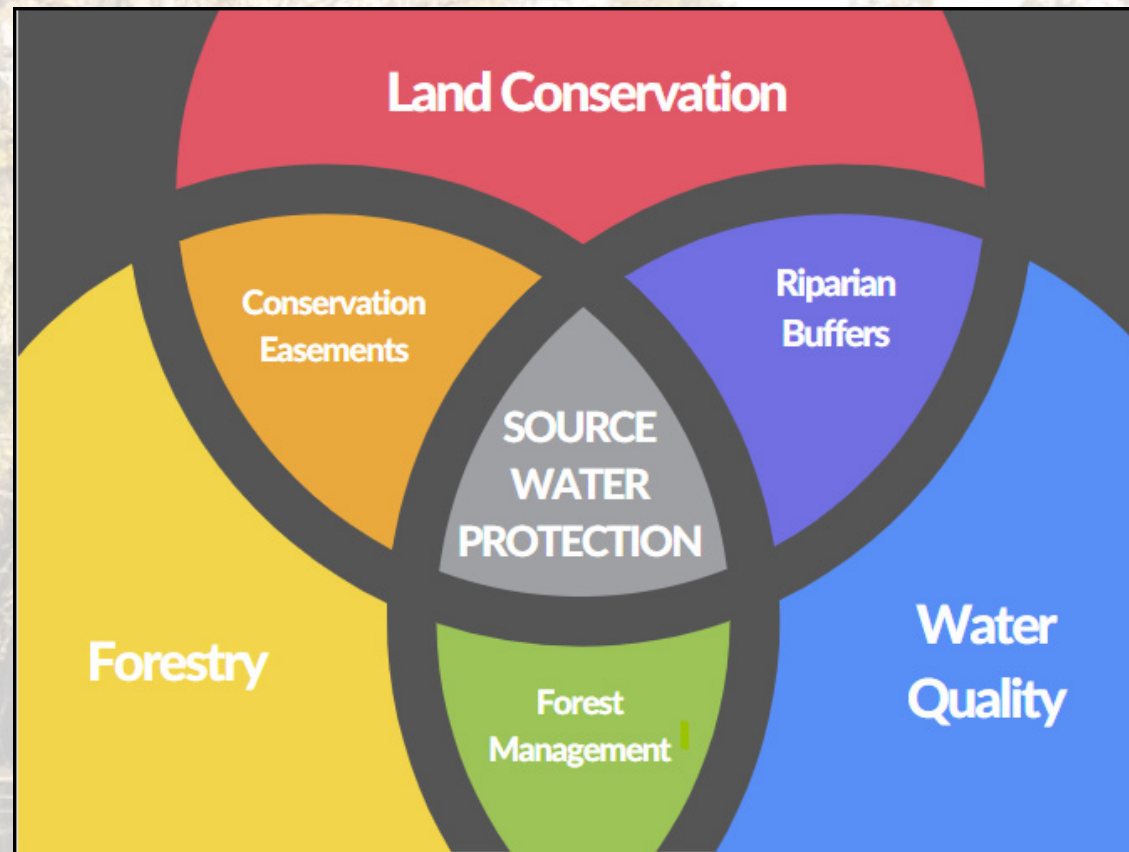


SOUTHEASTERN PARTNERSHIP FOR
FORESTS & WATER

SoutheasternPartnership.org
Kathy Hawes, info@southeasternpartnership.org

April 24, 2024

**CONSERVE THE
FORESTS THAT
PROTECT THE
DRINKING WATER.**



DIVISION OF WATER: Maps / evaluates priority DW watersheds

CONSERVATION GROUPS: Plan tree plantings and riparian buffer projects

LAND TRUSTS: Purchase/manage key parcels or easements

AG EXTENSION: Writes watershed plan

SOURCE WATER

UTILITY: Adds \$0.10 per meter to bills

WATERSHED GROUP: Conducts landowner outreach

DIVISION OF FORESTRY: Writes management / stewardship plans

NRCS: Provides landowner funds through EQIP, CSP...

PAPER COMPANY: Contributes money to buy key parcels



Focus: **FORESTS** and **FOREST LANDOWNERS**

To achieve maximum benefit to water quality/quantity:

- Maintain at least 60% forest cover in a watershed
- Keep forests as forests (no development)
- Keep forests managed and conserved (forest management plans/conservation easements)



STRATEGY:

- Host **Forests & Water Forums**
 - To begin **Conversations**
 - And form **Partnerships**
 - That seek **Funding**
 - To **Manage and Conserve Forested Watersheds**

Since 2014, Southeastern Partnership has facilitated
18 Forest & Water Forums in 8 States.



FLORIDA FORESTS & WATER FORUM 2023

TUESDAY & WEDNESDAY
OCTOBER 10 & 11, 2023
UF | IFAS AUSTIN CARY FOREST
CAMPUS | GAINESVILLE, FLA.

Welcome to the Florida
Forests & Water Forum
in Gainesville, Florida!

This event brings together partners from across the state to discuss the connection between healthy, managed forests and clean, reliable drinking water. Join forest landowners, utilities, conservation groups, state agencies, and others as they plan for a safe, secure future for all Floridians.



DAY 1: FORUM AGENDA

8:30 A.M. - 9:10 A.M. • OPENING

8:30 A.M. REGISTRATION AND NETWORKING
Stern Learning Center Conference Room
(breakfast on your own)

9:00 A.M. WELCOME
Gary Williams, Florida Rural
Water Association

9:10 A.M. - 10:15 A.M. • SETTING THE STAGE
Understand the impact of healthy, managed forests on safe, reliable drinking water in unique Florida landscapes.

9:10 A.M. FORESTS & WATER PARTNERSHIPS
Kathy Hawes, Southeastern Partnership
for Forests & Water

9:30 A.M. THE STATE OF FORESTS IN FLORIDA
Jarek Nowak, Florida Forest Service

9:45 A.M. THE STATE OF WATER IN FLORIDA
TBD

10:00 A.M. THE SCIENCE BEHIND THE
FOREST-WATER CONNECTION
Katie Glodzik, University of Florida

10:15 A.M. - 10:30 A.M. • BREAK

10:30 A.M. - NOON • PARTNER PANEL
Engage in a facilitated Q&A session to identify the differences - and similarities - among partners working on forest/water issues in Florida.

10:30 A.M. PERSPECTIVES

Jeremy Olson, St. Johns River Water
Management District

Paul Owens, 1,000 Friends of Florida

Gregory Marshall, Florida Forest Service

Robin Holland, Florida Forest Service

Chris Demers, University of Florida

Ben Williams, 2021 Florida Outstanding
Tree Farmer of the Year

Ben Lewis, Florida Rural Water Association

Jenn McElroy, Gainesville Regional Utilities

Jami Nettles, Weyerhaeuser Co.

Tyler Macmillan, Tall Timbers

NOON - 1:00 P.M. • LUNCH

Catered by Adam's Rib Co.

FORUM AGENDA CONTINUED ON BACK

2023 FLORIDA FORESTS & WATER FORUM

October 10 | Gainesville, FL



Partner Perspectives

A vast array of organizations and job functions closely related to forests provides a pool of potential new partners for your next project. Additionally, the consideration of diverse stakeholder perspectives, needs, and obligations

MORC Key Takeaways

Two important audiences that need to hear the messages about protecting forests for the sake of drinking water are legislators and unengaged landowners.

Companies like Weyerhaeuser (tree engineers) such as forest

Gainesville Regional Utilities strives for 100% beneficial reuse, which means utilizing reclaimed water for everything from irrigation to reduce the amount of groundwater withdrawn. It continually seeks solutions through green infrastructure projects.

Managed and protected forestlands are extremely valuable for ecosystems, aesthetics/recreation,

Both financial and technical assistance is available to forest landowners for land management activities and conservation easements, and organizations such as NRCS, Tall Timbers, The Longleaf Alliance, and Alachua Conservation Trust work directly with landowners to take advantage of these programs. The amount of funding is expected to increase dramatically over the next few years as part of the Inflation Reduction Act.



01

Setting the Stage



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Presentation |

02



03

Stewardship Solutions

Conservation

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Engineer
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/Land Mgmt):
Southern Environmental
nc.

ion Program Liaison

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recommended
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impact to ecosystems.
nation and training are
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it of Environmental
(DEP) has scientifically
BMPs and verified their
ss at protecting
ater resources.

ive Water Management
(WMDs) are actively
cosystem restoration,
response, recreation
nt, security, and forest
in pursuit of their
of Florida's water supply.

apid population growth means
in urban areas with existing
it away from natural lands to
s. Paul Owens explained why this
is message. | Presentation |

- rces
- for Forests & Water
- Data Center
- Public
- Protection
- Forest 2.0
- ng Water Administrators: Source
- ty: Water Funds Toolbox
- Landowner Resources
- Association
- Management Application
- ty: Pathway for Florida's
- Investment Partnerships
- Screen & Water
- Water Collaborative
- A Water Initiative
- Watershed Protection Fee
- Act
- Watershed Protection Program
- Water Fund



TEXAS:
Texas A&M
Forest Service



TEXAS PARTNERSHIP FOR
FORESTS & WATER

ARKANSAS:
AR Forestry
Division



**Arkansas Forests &
Drinking Water
Collaborative**

**SOUTH
CAROLINA:**
SC Rural Water
Association



SOUTH CAROLINA
FORESTS & WATER INITIATIVE

FLORIDA:
FL Rural Water
Association



FLORIDA PARTNERSHIP FOR
FORESTS & WATER

GEORGIA:
GA Forestry
Foundation



GEORGIA PARTNERSHIP FOR
FORESTS & WATER



SOUTHEASTERN PARTNERSHIP FOR
FORESTS & WATER

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April 24, 2024

WATERSHED PROTECTION



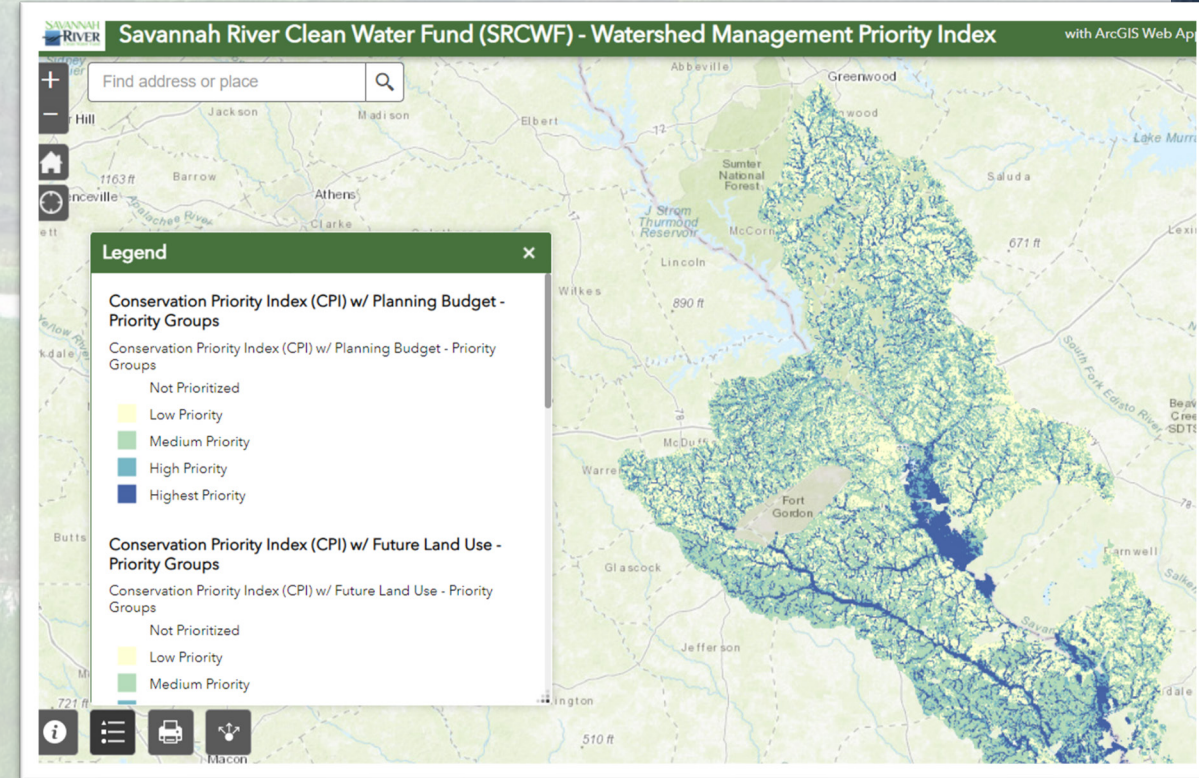
SAVANNAH RIVER CLEAN WATER FUND

- Forest/Water Collaboratives:
 - Identify **priority forests** within priority watersheds
 - Identify **priority parcels** within priority forests
 - Target specific **forest landowners**

EXAMPLE: Savannah River Clean Water Fund's [Conservation Planning Priority Toolkit](#)

Weighted Factors:

- Forest Index (proximity to streams, soil erodibility, slope, floodplain, etc.)
- Future Land Use Projection (ICLUS data)
- Planning Budgets (using forest land values)



SEBAGO CLEAN WATERS (Portland, ME Water District)

COLLABORATION

Utility + land trusts +
conservation groups +
companies

- Formed in 2017
- Operates as water fund
- Raised \$10m
- Permanent Protections
- Land Management



Only 15% of the Sebago Lake watershed is currently conserved. To maintain the **purity of the water**, we need your help to permanently protect **25% of the forestland**.

**Conserving the forests
that filter the flow.**

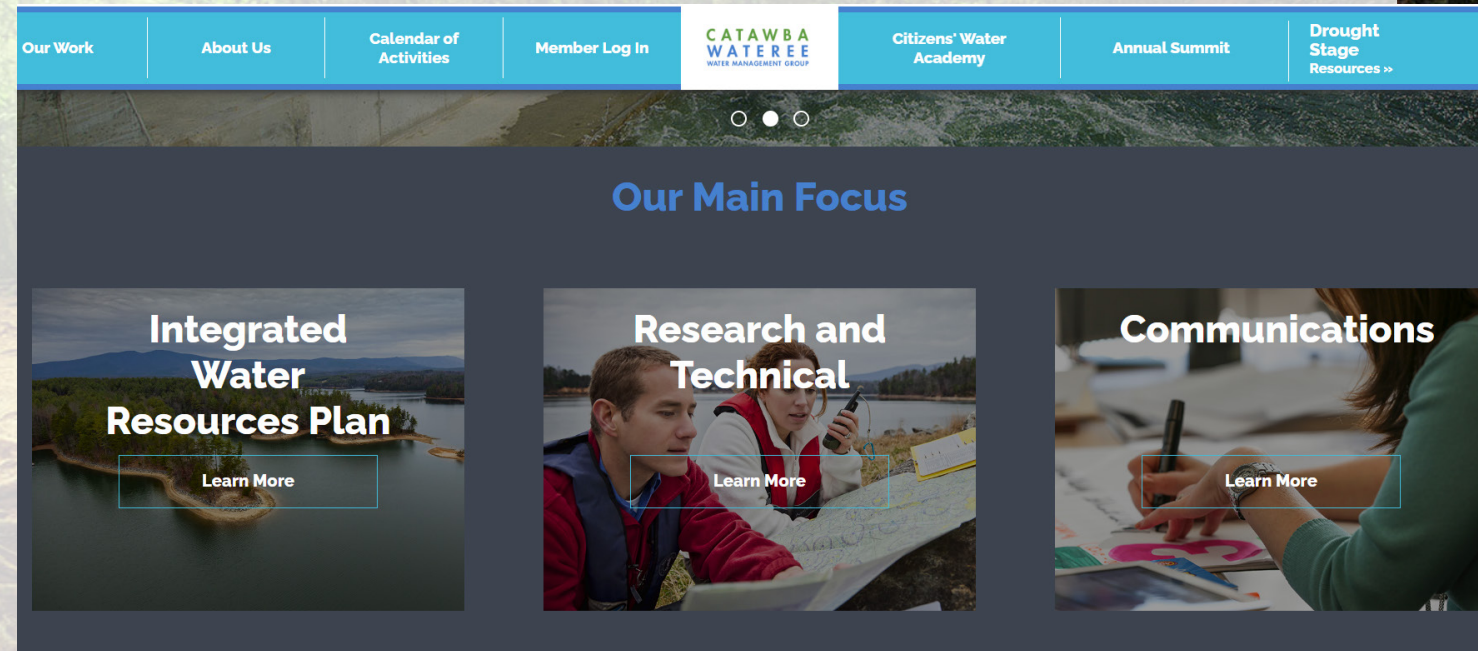


CATAWBA-WATEREE WATER MGMT GROUP (NC)

UTILITY BUDGETS

Utilities pay dues to join group. Some funds are used for watershed projects.

Land acquisitions and easements are bought with grants and donations from land trusts.



HOW

CENTRAL ARKANSAS WATER (Lake Maumelle)

UTILITY

Watershed Protection Fee

\$0.90/meter/month

Generates \$2m+

Green Bond

Used for

Forest Management
(Prescribed Burns)

Land Acquisition

Conservation Easements

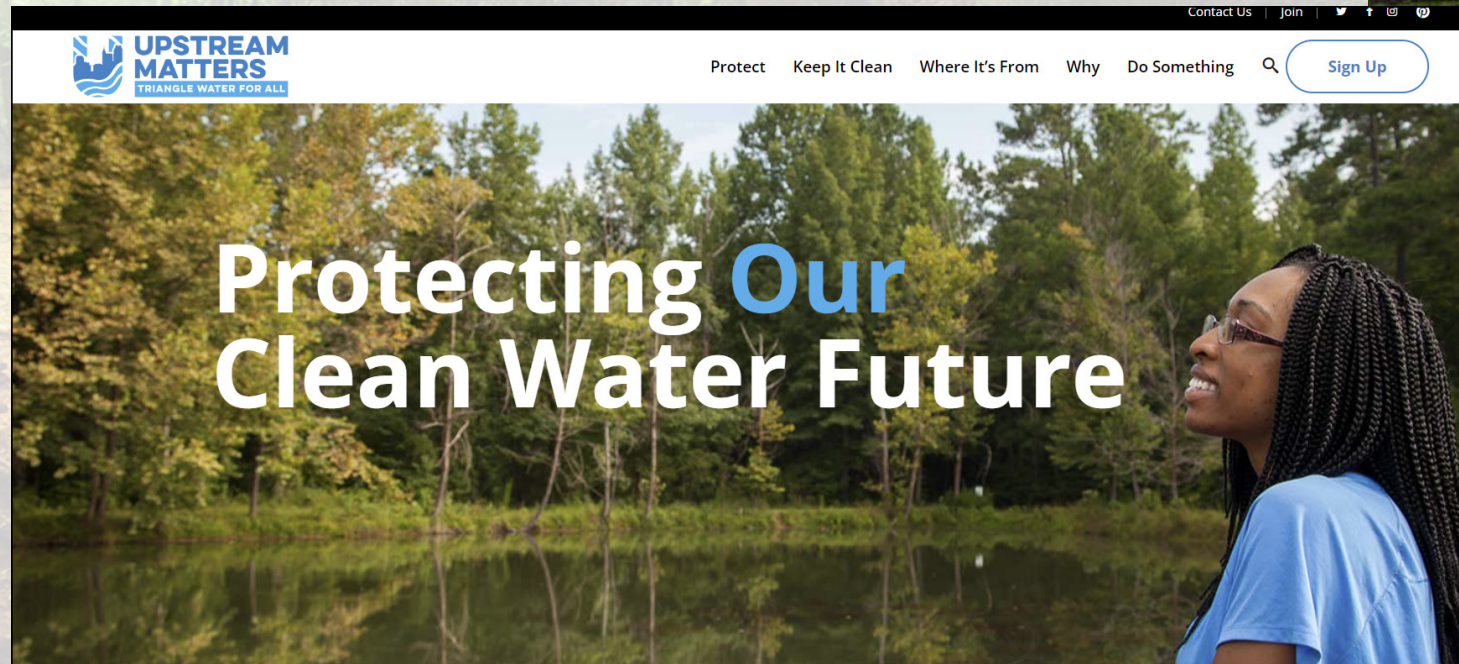


City of Raleigh Watershed Protection Program

Approx. \$0.40/meter/month
Generates \$2m+

Competitive Grant Program:
Land Trusts Compete
for Annual Grants
For Upstream Land
Protection Projects

UpstreamMatters.org



Middle Chattahoochee Forests & Water Supply Forum

2017

Middle Chattahoochee Forests and Water Supply Forum Final Report June 2017

On May 18, 2017, 55 leaders and stakeholders from Georgia and Alabama agencies and Middle Chattahoochee Watershed forestry, drinking water, and conservation communities (Attachment A) convened in Phenix City, Alabama for the Middle Chattahoochee Forests and Water Supply Forum. The purpose of the Forum was to explore the connections between forests and drinking water in the Middle Chattahoochee Watershed, and to brainstorm specific ways to collaborate to continue to sustain these two very important and interdependent resources.

The Middle Chattahoochee Forests and Water Supply Forum was convened with the knowledge that forests and drinking water are strongly connected and dependent on each other. Southeastern forests that are actively managed can help protect and increase drinking water supplies while also providing economic benefits. The Forum's **primary goals and objectives were to:**

- 💧 Stimulate and accelerate community-based watershed protection to benefit both urban and rural forests and drinking water
- 💧 Have robust discussion about how to use available research and information to

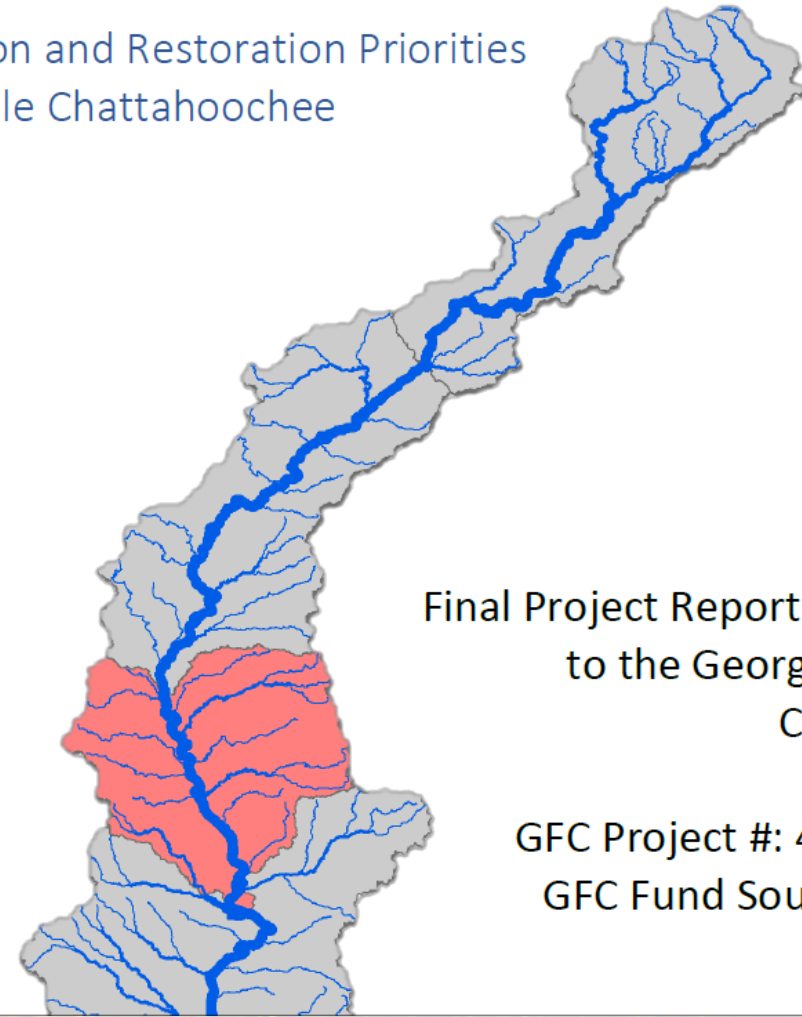


Conservation & Restoration Priorities in the Middle Chattahoochee River Basin

2019

Watershed Threats
Watershed Priorities
using
Watershed Management
Priority Index

Conservation and Restoration Priorities
in the Middle Chattahoochee
River Basin



Final Project Report Submitted
to the Georgia Forestry
Commission

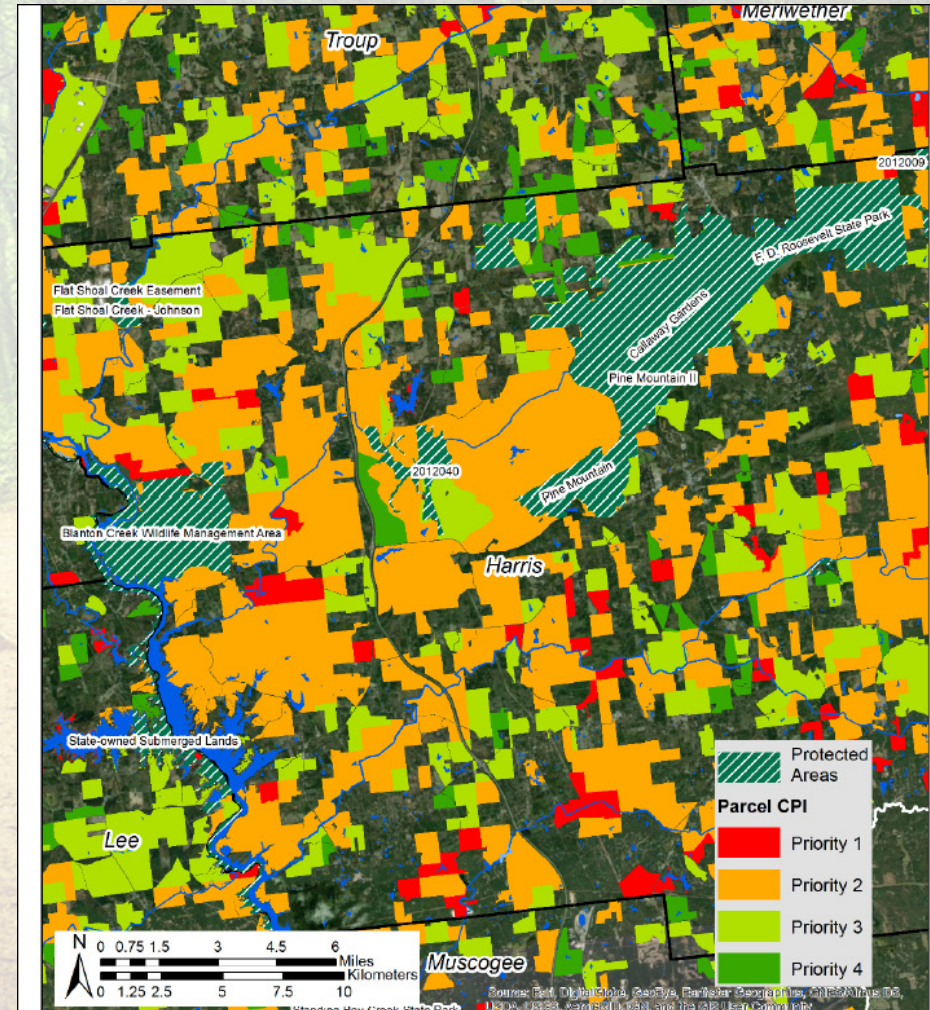
GFC Project #: 420150276
GFC Fund Source: 15006



Watershed Management Priority Index

7 Factors:

- Slope
- Proximity to Streams
- Proximity to Ponds/Wetlands
- 100-Year Floodplain
- Soil Erodibility Factor
- Soil Group
- Soil Depth
- Land Use



SoutheasternPartnership.org/Resources:

Videos

[AWWA: Protecting Drinking Water at the Source:
Working with the USDA Forest Service \(2019\)](#)

Protecting Drinking
Water at the Source

Working With the USDA Forest Service

[Source Protection Handbook:
Using Land Conservation to Protect Drinking
Water Supplies \(2014\)](#)

USING LAND CONSERVATION TO
PROTECT DRINKING WATER SUPPLIES

SOURCE PROTECTION
HANDBOOK



FOREST WATER RELATIONSHIP
VIDEO SERIES



FORESTRY AND LAND
CONSERVATION VIDEO



WILDFIRE IMPACT ON DRINKING
WATER QUALITY



PRESCRIBED FIRE IMPROVES
DRINKING WATER QUALITY



SOUTHERN REGION

AL

AR

FL

GA

KY

LA

49% of Southern land is forested.

MS

NC

OK

SC

TN

TX

VA

Clean water grows on these trees.

Okay, not technically, but forests do provide the cleanest water of any land use to keep drinking water safe and reliable.

TOTAL SOUTHERN WATER SUPPLY

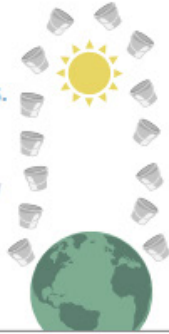
State & Private forests provide

44.3%

of the total water supply.

That's equal to **97.8 trillion gallons.**

HOW MUCH LIQUID IS THAT?
That's enough water to fill a stack of five gallon buckets that would extend all the way to the sun & back **24 TIMES.**



SOUTHERN FORESTS



THE CHALLENGE

Population is expected to increase more than **30%** over the next **40 years** compared to 2012 levels.

2052

THE THREAT

UP TO 23 MILLION ACRES of our forests are forecasted to be converted to other uses by **2060.**



2012

POPULATION INCREASE OF 30%

POPULATION SERVED

ALL FORESTS
113 MILLION PEOPLE



STATE AND PRIVATE FORESTS
57 MILLION PEOPLE



FEDERAL FORESTS
56 MILLION PEOPLE



HEALTHY FORESTS ARE CRITICAL TO DRINKING WATER

Healthy, managed forests provide the cleanest water of any land use, and help keep drinking water safe, reliable, and affordable.

TO SUM THINGS UP...



FOREST STEWARDSHIP AND BMPs

Foresters work with landowners to develop forest stewardship plans and implement Best Management Practices that protect soil and water resources.



"Our investments in healthy forests today lead to higher quality drinking water in our communities tomorrow."

David LaFrance, CEO of American Water Works Association
Learn more by watching our video! <https://bit.ly/316jTko>

DRINKING WATER DEPENDS ON HEALTHY FORESTS

Contact for more information

Wib Owen | wib@southernforests.org

Kitty Weisman | kitty.weisman@icloud.com



Liu, Ning; Dobbs, G. Rebecca; Caldwell, Peter V.; Miniat, Chely Fort; Bobstad, Paul V.; Nelson, Stacy; Sun, Ge. 2020. Quantifying the role of State and private forest lands in providing surface drinking water supply for the Southern United States. Gen. Tech. Rep. SRS-248. Asheville, NC: U.S. Department of Agriculture-Forest Service, Southern Research Station. 405 p. Caldwell, P., Muldoon, C., Ford-Miniat, C., Cohen, E., Krieger, S., Sun, G., McKelvey, S., and Bobstad, P.V. 2004. Quantifying the role of National Forest system lands in providing surface drinking water supply for the Southern United States. General Technical Report SRS-197. Asheville, NC: U.S. Department of Agriculture-Forest Service, Southern Research Station. 125 p.

GEORGIA FORESTS & WATER FORUM

Collaborate on the future of Georgia's forested watersheds

Don't miss this chance to join the Georgia forestry and water quality communities in ensuring healthy Georgian forested watersheds that provide safe, reliable drinking water through strong partnerships, collaboration, funding, and action. [View the Agenda](#)

April 30 – May 1

10 AM – 4 PM

 Forsyth, GA

[REGISTER NOW](#)



HOSTED BY



SOUTHEASTERN PARTNERSHIP FOR
FORESTS & WATER

SoutheasternPartnership.org
Kathy Hawes, info@southeasternpartnership.org

April 24, 2024

SC

Thank you!

SoutheasternPartnership.org
info@southeasternpartnership.org

Kathy Hawes